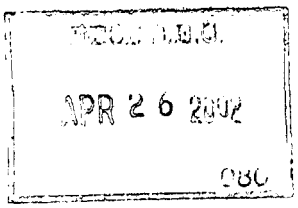
Media release



Basel, 25 April 2002

SUPPL

Roche R&D Day 2002: Innovation – our key to success

Good progress in Roche's R&D pipeline – Strong mid term flow of new products

- **138 projects in Pharma research and 74 projects in Pharma development**
- **48 new molecular entities (NMEs) in pipeline**
- **35% increase in the number of NMEs in development portfolio over the past 12 months**
- **Filing of 17 new drug applications and several additional indications for existing products planned in the next 5 years**
- **Extending the leading position in *in vitro* diagnostics with a broader portfolio in Virology, Blood Screening and Genomics**
- **Uniquely placed to take advantage of Genomic Medicine**

At its R&D conference, Roche today informed about the significant progress of its R&D pipeline over the last two years.

Broad product pipeline in Pharmaceuticals and Diagnostics

Strengthening Pharma pipeline

With 138 projects in research and 74 projects in development, including 48 new molecular entities (NMEs), Roche's Pharma pipeline has improved in quantity, quality and value. Over the past 12 months the number of potential products in the development pipeline has increased by 35%.

The higher hurdles Roche has put in place before moving compounds to the next stage of development, have increased the quality of pipeline projects. With the assignment of rigorous product profiles Roche expects that these medicines will bring value to patients, physicians and payers.

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Roche's Pharmaceuticals division has diversified access to innovation through its in-house R&D activities, with currently 33 NMEs in development. Including existing licensing agreements and opt-in opportunities Roche's Pharma pipeline contains 48 NMEs.

Over the next five years the Group expects to file seventeen new drug applications (NDAs) for products in a variety of key disease areas including oncology, HIV/AIDS, anxiety/depression, stress incontinence and rheumatoid arthritis.

"Over the last five years, the Pharma division has seen major changes in the organisational structure and the processes that will deliver our pipeline," said Jonathan Knowles, Head of Global Research. "These changes are now delivering increased productivity in terms of quantity, quality and value."

Broad Diagnostics pipeline

Based on its broad product portfolio, Roche Diagnostics has outpaced the competition with record double-digit sales and profit growth for the last three years. The division is investing 9% of annual sales revenues in R&D and spends more than any other company in the diagnostics industry. The activities include in-house R&D projects, independently run "venture companies", and a number of alliances with technology leaders.

The range of diagnostic options is expected to broaden significantly in the coming years, as advances in genomics and proteomics enable industry to develop new tests to analyse risk factors at the gene- or protein level early on and provide tests that improve efficacy and safety of therapies. Roche Diagnostics is committed to use its expertise in these fields to create new markets. The division aims to provide healthcare professionals with tools to analyse the large amount of data and to translate them into medical action.

The R&D pipeline ranges from projects focused on the search for specific genetic variants of common, complex diseases as well as pharmacogenetic testing for efficacy and adverse effects, disease predisposition and patient stratification. The division has a genomics portfolio, which includes a genetic test for the analysis of Cystic Fibrosis and the first pharmacogenetic tests involving the analysis of genes such as P450 to determine the effectiveness and dosage of various drugs.

The launch of new cancer tests and an extended range of assays for virology and blood screening will further diversify and enrich Roche Diagnostics' portfolio. Analysers such as Cobas AmpliPrep and Cobas TaqMan, together with the division's AmpliNat and AmpliScreen tests, have a sales

potential of more than CHF 500 million/year. Innovative software and IT-based products will be an important part of Roche Diagnostics' portfolio. New software will form an integral part of analysers such as the next-generation Modular system. This will play a major role in helping healthcare professionals to analyse large amounts of data and to translate information into medical action.

Looking to the long term, Roche Diagnostics intends to continue developing its molecular diagnostics business and expanding the market for PCR-based products. Alliances with deCODE genetics and Partners Health-Care System will yield genetic information on common complex diseases such as hypertension, obesity and metabolic disorders. The intelligent combination of this data with Roche Diagnostics' know-how will lead to pioneering products and integrated health care solutions.

Heino von Prondzynski, Head of the Diagnostics Division said: "Roche Diagnostics is not only ready to face the paradigm shift taking place in the diagnostics industry today, but will actually shape it. Especially in the field of genomics and proteomics we will lead the industry in turning scientific knowledge into marketable products and useful healthcare information."

Genomics & Proteomics

Roche has established a variety of in-house initiatives and organisations to capitalise more fully on the opportunities offered by genomics and proteomics:

- Joint program on applied genomics
- Integrated Cancer Care Unit
- Roche Molecular Diagnostics
- Proteomics Initiative

A network of over 30 R&D alliances world-wide, with companies such as deCODE genetics, (Reykjavik, Iceland) and Partners Health-Care System, (Boston, USA), has strengthened Roche's access to innovations. deCode genetics has identified 13 new genetic risk factors for common diseases over the last three years. Identification of 10 genetic loci associated with disease phenotypes have provided Roche with valuable information for developing new diagnostic tests in diseases such as hypertension, obesity and other metabolic diseases within the next 3 to 5 years and for focusing pharmaceutical research on the identification of drug target pathways which may lead to new products for diabetes, stroke and schizophrenia within the next 7 to 10 years.

No 1 in oncology

Roche will continue to develop innovative drugs like Xeloda, Herceptin and MabThera, whose novel mechanisms of action offer survival benefits for patients with cancer, the second leading cause of death in western countries.

By combining their efforts, the Group's Pharmaceuticals and Diagnostics divisions will deliver new products for early disease detection, specific therapy and therapy monitoring, thus contributing to more individualised patient management options.

These new oncology medicines include R1415 (Tarceva), R440 a cell cycle inhibitor, R1273 (rhu Mab 2C4) for cancer treatment and R744 (next generation anaemia treatment) as well as R1124 (G Protein-Coupled Receptor modulator).

- **Tarceva (R1415),** currently in phase III development, is a tyrosine kinase inhibitor for non-small cell lung cancer (NSCLC) and other solid tumours. Clinical testing is focused on using the drug as first-line therapy in NSCLC, with two phase III trials under way for this indication in the US and EU. Roche's partnering activities with OSI include a phase II study of the drug in pancreatic cancer and as a third-line treatment in NSCLC.

- **Humanised monoclonal antibody,** rhu MAB 2C4 (R1273). This drug is in phase I trials for the treatment of a significant number of solid tumours. It blocks the growth of lung, breast, prostate and colon cancer cell lines *in vitro*. The compound may sensitise tumour cell lines to chemotherapy.

In addition to drugs interacting with the HER-2 receptor pathway (R1415 and R1273), novel cytotoxic agents are in development to treat cancer, notably the cell cycle inhibitor R440, now in phase II development.

- **Cell Cycle inhibitor (R440).** This compound is being developed for the treatment of NSCLC, breast and colon cancer. It is a twice-daily oral formulation and offers dual action in arresting the cell cycle in M phase and inducing apoptosis. R 440 has also demonstrated substantial activity in 15 of 16 tumour models. Phase II monotherapy studies are ongoing in NSCLC, breast cancer and colon cancer as well as phase I combination studies.

Roche Diagnostics already markets the Elecsys line of instruments and reagents for small to high-volume diagnostic laboratories, which includes a broad menu of assays for oncology.

Roche Diagnostics has initiated a programme within the Integrated Cancer Care Unit (ICCU) to identify new diagnostic markers or marker profiles to fill today's gaps in our ability to diagnose cancer. The focus is on developing screening tests for early cancer detection, which will enable early therapeutic intervention and improve the probability of cure. ICCU efforts are also concentrating on tests that will enable doctors to take an individualised treatment approach based on molecular characterisation of cancer cells and the genetic background of patients. Roche is already developing its first tests of this kind for use in combination with with Xeloda and Herceptin.

New solutions to challenges in viral diseases

Continuing more than 15 years of ground-braking research and development and a string of award-winning new drugs and diagnostic technologies - including protease inhibitors for effective treatment of HIV and PCR technology to detect and amplify viral nucleic acids - Roche plans to further expand its portfolio with new innovative treatments and highly specific automated tests.

- **T-20 Fusion Inhibitors for HIV (R698).** Current therapy of HIV infection is usually based on prescribing a combination of multiple drugs. This approach has proven highly effective, but now drug-resistant strains of the virus are emerging, creating an urgent and growing medical need for drugs with new mechanisms of action.

  T-20 is the first of a new class of anti-HIV drugs, called fusion inhibitors, developed in collaboration with Trimeris, to help meet this need. It is a 36 amino acid synthetic peptide, which mimics the gp41 domain of HIV, thereby disrupting the fusion of the virus with the body's cells. T-20 is active against HIV-1 isolates resistant to protease inhibitors, nucleoside and non-nucleoside reverse transcriptase inhibitors.

  Recently Roche announced positive 24-week results from the first pivotal Phase III study of T-20, the fusion inhibitor currently furthest along in clinical development. These results demonstrate that T-20 enhances the activity of combination therapy over 24 weeks and are even more encouraging than the positive results of earlier studies indicated.

- **Extended diagnostics portfolio in virology.** Roche Diagnostics intends to expand its already broad menu of PCR-based Amplicor tests for HCV, HBV, HIV and CMV by developing fully automated PCR tests and tests utilising chip technology. Cobas AmpliPrep/CobasTaqMan is

the first highly sensitive, fully automated PCR system for diagnosing HIV, HCV and HBV. This system can be used both for detecting active infections and for quantitative testing of viral load to monitor treatment responses.

Roche Diabetes portfolio

The WHO is predicting that Diabetes will reach epidemic proportions. It is estimated that by 2025 there will be 300 million of people with diabetes world-wide.

- Diagnosing Diabetes. Roche, the industry leader in diabetes care, offers the broadest range of diabetes products. The Accu-Chek product family, Roche's top-selling brand with more than CHF 2 billion in sales per year, is just one example of the company's expertise in this area. The current R&D activities in the Diabetes area are focused on developing cutting edge technologies for integrated spot monitoring and continuous glucose monitoring systems that will help make living with diabetes easier.

- New ways for Diabetes treatment. Despite the availability of numerous therapeutic options, there is a great demand for drugs that produce a durable effect on glycemic control. The insulin sensitiser (R483) has been shown in trials to improve insulin sensitivity and inhibit glucose production in addition to offering superior efficacy.

New areas of interest for Roche

Osteoporosis

- Bonviva (R484) is a highly potent bisphosphonate that reduces the risk of fracture in women with post menopausal osteoporosis (PMO). Currently in phase III development, Bonviva has demonstrated the highest vertebral fracture risk reduction ever observed with a bisphosphonate and tolerability is excellent. An NDA filing for an oral formulation for treatment and prevention of PMO is expected in the second half this year, and will be followed in 2004 by filings for a more convenient oral formulation and an intravenous form.

Depression

- R673, an NK-1 Receptor Antagonist, is in phase II development for depression. It could represent a new generation of anti-depressant, offering patients the advantage of good efficacy with fewer adverse effects than the previous generation of drugs.

Emphysema

- Emphysema is part of the tobacco-induced disease spectrum of chronic obstructive lung disease (COPD), the fourth leading cause of death in the US. R667, a selective retinoic acid agonist, is in phase II development for the treatment of emphysema. In animal studies, it has demonstrated the ability to regenerate lung tissue and restore lung function, and it may address the underlying pathology of emphysema.

Asthma

- A selective integrin antagonist VCAM (R411), now in phase II, will address an unmet medical need. Current asthma therapies merely lower the risk of worsening the recurrence of asthmatic episodes. This novel, nonsteroidal treatment targets the inflammatory process underlying asthma and has shown better efficacy than leucotriens in animal studies and does not show the side effect liability of inhaled steroids.

Stress urinary incontinence (SUI)

- More than 48 million people (98% of them women) suffer from urinary incontinence, which is usually stress-related. The need for treatment options is great as there are no globally approved drugs yet for SUI. R450, alpha 1 adrenoceptor agonist, is in phase II development for the treatment of patients with SUI. R450 has been shown in phase II trials to significantly decrease frequency of incontinence episodes.

Outlook over the next 5 years

"The links between diagnostics and the pharmaceuticals business have given us a unique and strong position in the healthcare industry. In the mid- to long-term, the prospects for Roche have never been more exciting" said Franz B. Humer, CEO of Roche. "Within the next five years we expect innovative products from both divisions which will allow us to create more individualized therapies, thus benefiting patients and reducing healthcare costs."

The R&D conference was held in Penzberg, Germany. Penzberg is the home of Roche's largest biotech site and hosts pharmaceuticals and diagnostics research & development as well as production facilities. More than 3000 people are employed at this 'State-of-the-Art' Roche unit.

A live audio webcast of the Roche R&D Media Day will be available from 09:30h to 16:30h (Central European Time) on Thursday 25 April 2002 through our website:
http://www.roche.com/med-events-rdday.htm